

REMARKS

Applicants have carefully considered the June 1, 2005 Office Action, and the amendments above together with the comments that follow are presented in a bona fide effort to address all issues raised in that Action and thereby place this case in condition for allowance. Claims 1-29 were pending in this application. Claims 27-29 have been withdrawn from consideration pursuant to the provisions of 37 C.F.R. § 1.142(b). In response to the Office Action dated June 1, 2005, claims 1, 4, 9 and 13 have been amended and claim 5 has been canceled. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure as, for example, the depicted embodiments (FIGS. 27, 16, 30, 31 and 32) and related discussion thereof in the written description of the specification. Applicants submit that the present Amendment does not generate any new matter issue. Entry of the present Amendment is respectfully solicited. It is believed that this response places this case in condition for allowance. Hence, prompt favorable reconsideration of this case is solicited.

Claims 1-13, 15-17 and 21 were rejected under 35 U.S.C. § 102(e) as being anticipated by Takatani et al. (U.S. Pat. No. 6,812,496, hereinafter "Takatani"). In the statement of the rejection, the Examiner referred to Figs. 4-5 and 12 of Takatani, asserting the disclosure of a semiconductor device corresponding to that defined in independent claims 1, 4, 9 and 13 and dependent claims 2-3, 5-8, 10-12, 15-17 and 21. Applicants respectfully traverse.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the possession of one having ordinary skill in the art. *Helifix*

*Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994). Moreover, in imposing the rejection under 35 U.S.C. § 102, the Examiner is required to specifically identify wherein an applied reference is perceived to identically disclose each feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). That burden has not been discharged. Moreover, there are significant differences between the claimed inventions and the device disclosed by Takatani that would preclude the factual determination that Takatani identically describes the claimed inventions within the meaning of 35 U.S.C. § 102.

Claim 1, as amended, describes that the back electrode is a transparent electrode. This limitation is disclosed in the fifth embodiment of the written description of the specification. Claim 4 has been amended to include the limitations of claim 5 (now canceled) as well as to further describe that the back electrode is a transparent electrode. Support for the amendment to claim 4 is found in the third embodiment of the written description of the specification. In contrast, Takatani fails to disclose or remotely suggest a transparent back electrode and, as such, fails to identically disclose each feature of the claimed inventions.

Claim 9 has been amended to describe that the semiconductor element layer includes an emission layer located inward beyond the region having the concentrated dislocations and the recess portion is formed between the emission layer and the region having the concentrated dislocations. Support for the amendment to claim 9 is found in the seventh embodiment of the written description of the specification. Takatani fails to disclose or remotely suggest a high

resistance region formed separately from concentrated dislocations and, as such, fails to identically disclose each feature of the claimed invention.

With respect to original claim 21, Takatani discloses in Figure 5, that reference numeral 100 is a GaN substrate and that semiconductor element layers 102-109 (Fig. 1) are formed on the GaN substrate 100. Thus, Applicants submit that while the GaN substrate 100 of Takatani corresponds to a substrate of claim 21, the semiconductor layers 102-109 do not correspond to the substrate described in independent claim 21. Moreover, contrary to the Examiner's assertion, the GaN substrate 100 does not include a first region having a first thickness and a second region having a second thickness smaller than the first thickness, as required in independent claim 21. Accordingly, the Examiner is requested to reconsider and withdraw the rejection with respect to independent claim 21 and the claims dependent therefrom.

Accordingly, for the reasons set forth above, the rejection of claims 1-13, 15-17 and 21 under 35 U.S.C. § 102(e) is not legally viable. Applicants, therefore, solicit the Examiner to reconsider and withdraw the rejection.

Dependent claim 14 was rejected under 35 U.S.C. § 103(a) for obviousness predicated upon Takatani in view of Wilmsen et al., *Vertical-Cavity Surface-Emitting Lasers*, Design, Fabrication, and Applications, pp 4, 7 (1999). Applicants respectfully traverse.

Applicants incorporate herein the arguments previously advanced in traversal of the rejection of claim 13 under 35 U.S.C. § 102(e) predicated upon Takatani. The secondary reference to Wilmsen et al. does not cure the argued deficiencies of Takatani. Thus, even if the applied references are combined as suggested by the Examiner, and Applicants do not agree that the requisite realistic motivation has been established, the claimed invention will not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Applicants gratefully acknowledge the Examiner's indication of allowable subject matter. Claims 18-20 and 24-26 were allowed. Claims 22 and 23 were objected to as being dependent upon a rejected base claim, but would be allowable if recast in independent form. However, Applicants submit that for the reasons outlined above, pending claims 1-26 are in condition for allowance.

Applicants note the Examiner's Statement of Reasons for Allowance included on pages 7-8 of the Office action. Entry of that Statement into the record should not be construed as any agreement with or acquiescence by Applicants in the reasoning stated by the Examiner. Applicants positions on the issues appear in Applicants' response. The Statement of Reasons for Allowance should not be used to interpret the cited claims, particularly to the extent if any that the Statement of Reasons for Allowance may differ from the express language of the claims and/or Applicants' positions on patentability of those claims. It is respectfully submitted that the allowed claims should be entitled the broadest reasonable interpretation and broadest range of equivalents that are appropriate in light of the language of the claims, the supporting disclosure and Applicants' prosecution of the claims, without reference to the Statement of Reasons for Allowance.

It is believed that pending claims 1-26 are now in condition for allowance. Applicants therefore respectfully request an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicants' representative at the telephone number shown below.

**Application No.: 10/766,031**

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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